

REMARKS

The Official Action mailed November 7, 2006, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Filed concurrently herewith is a *Request for Continued Examination*. Accordingly, the Applicant respectfully submits that this response is being timely filed.

The Applicant notes with appreciation the consideration of the Information Disclosure Statement filed on October 20, 2003.

A further Information Disclosure Statement is submitted herewith and consideration of this Information Disclosure Statement is respectfully requested.

Claims 1-30 were pending in the present application prior to the above amendment. Claim 4 has been canceled without prejudice or disclaimer, and claims 1-3, 7, 9 and 11 have been amended to better recite the features of the present invention. Accordingly, claims 1-3 and 5-30 are now pending in the present application, of which claims 1-3, 7 and 9 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

Paragraph 1 of the Official Action rejects claims 1, 2, 7, 9, 11, 12, 14-17, 19-22, 24-27, 29 and 30 as anticipated by U.S. Patent Application Publication No. 2003/0011586 to Nakajima. The Applicant respectfully submits that an anticipation rejection cannot be maintained against the independent claims of the present application, as amended.

As stated in MPEP § 2131, to establish an anticipation rejection, each and every element as set forth in the claim must be described either expressly or inherently in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Independent claims 1-3, 7 and 9 have been amended to recite a switching regulator comprising a switching regulator control circuit comprising a second thin film transistor formed over a substrate; and a switching element packed on a FPC (claims 1,

3, 7 and 9) or on the substrate (claim 2). These features are supported in the present specification, for example, by the disclosure at page 5, lines 22-31, and Figure 1. For the reasons provided below, the Applicant respectfully submits that Nakajima does not teach the above-referenced features of the present invention, either explicitly or inherently.

The Official Action asserts that Nakajima teaches "a switching regulator control circuit (*See figure 13, elements 23U, 25, and 26 comprise a switching regulator control circuit*)" (page 2, Paper No. 20061101; emphasis in original). That is, the Official Action appears to be asserting that the horizontal driver circuit 23U, power supply circuit 25 and power saving mode control circuit 26 shown in Figure 13 (paragraph [0082]+) comprise the switching regulator control circuit of the present claims. The Applicant respectfully disagrees and traverses the assertions in the Official Action.

The Official Action does not demonstrate how Nakajima necessarily teaches that the horizontal driver circuit 23U, power supply circuit 25 and power saving mode control circuit 26 together form a switching regulator control circuit, either explicitly or inherently. Rather, the power supply circuit 25 and the power saving mode control circuit 26 may have a similar function to a switching regulator, and the power saving mode control circuit 26 may have a similar function to a switching regulator control circuit (*see paragraphs [0081], [0099] and Figure 16*). Therefore, even if one were to establish that the power saving mode control circuit 26 of Nakajima corresponds to the switching regulator control circuit of the present claims, Nakajima does not teach that the power saving mode control circuit 26 comprises a thin film transistor, either explicitly or inherently.

The Official Action further asserts that Nakajima teaches "a second thin film transistor (*See figure 23: circuit representation of element 26 in figure 13, element Qn12 ~ second thin film transistor ...*)" (page 2, Paper No. 20061101; emphasis in original). Nakajima does not teach that all the elements shown in Figure 23, including Nch MOS transistor Qn12, are part of the power saving mode control circuit 26 shown in Figure

13. Rather, Nakajima merely teaches a charge pump type DD converter comprising partial mode control circuit 26', that Nch MOS transistor Qn12 is a separate part connected to the partial mode control circuit 26', and that the "partial mode control circuit 26' in FIG. 23 corresponds to the power saving mode control circuit 26 in FIG. 13 and FIG. 15" (paragraphs [0119]-[0120]). Nakajima does not teach that the partial mode control circuit 26' comprises a thin film transistor. Also, Nakajima appears to teach that a charge pump type DD converter is the power supply circuit 25 shown in Figure 9; however, Nakajima does not teach a switching regulator itself.

Therefore, the Applicant respectfully submits that Nakajima does not teach a switching regulator comprising a switching regulator control circuit comprising a second thin film transistor formed over a substrate; and a switching element packed on a FPC or on the substrate, either explicitly or inherently.

Since Nakajima does not teach all the elements of the independent claims, either explicitly or inherently, an anticipation rejection cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 102 are in order and respectfully requested.

Paragraphs 2-4 and 7 of the Official Action reject claims 3-6, 13, 18, 23 and 28 as obvious based on the combination of U.S. Patent Application Publication No. 2002/0175662 to Sakurai and Nakajima, either alone or in combination with one of U.S. Patent Application Publication No. 2002/0158590 to Saito, U.S. Patent Application Publication No. 2001/0007432 to Ayres, and U.S. Patent Application Publication No. 2002/0145041 to Muthu. The Applicant respectfully submits that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present application, as amended.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference

teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Please incorporate the arguments above with respect to the deficiencies in Nakajima. Sakurai, Saito, Ayres and Muthu do not cure the deficiencies in Nakajima. The Official Action concedes that "Sakurai does not mention a pixel portion and the second thin film transistor" (page 6, Paper No. 20061101). As noted above, Nakajima does not teach that the power saving mode control circuit 26 or the partial mode control circuit 26' should comprise a thin film transistor. Therefore, Sakurai and Nakajima do not teach or suggest a switching regulator control circuit comprising a second thin film transistor.

The Official Action relies on Saito, Ayres and Muthu to allegedly teach the features of the dependent claims. Specifically, the Official Action relies on Saito to allegedly teach an inductor, diode and capacitor packed on a flexible printed circuit (page 9, Id.), on Ayres to allegedly teach an active matrix liquid crystal display where a diode and a capacitor are packed on the same substrate as a pixel portion (page 10, Id.), and on Muthu to allegedly teach an LCD based freezer driver in which a plurality of switching regulator control circuit are formed for each of red, green, and blue lights (page 14, Id.). However, Sakurai, Nakajima, Saito, Ayres and Muthu, either alone or in

combination, do not teach or suggest that the power saving mode control circuit 26 or the partial mode control circuit 26' should comprise a thin film transistor. Since Nakajima Sakurai, Nakajima, Saito, Ayres and Muthu do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

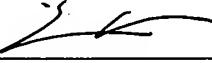
Paragraphs 5 and 6 of the Official Action reject claims 7-10 as obvious based on U.S. Patent Application Publication No. 2002/0044145 to Tomio, either alone or in combination with U.S. Patent Publication 2003/0201967 to Yu. The Applicant respectfully submits that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present application, as amended.

Independent claims 7 and 9 have been amended to recite a switching regulator comprising a switching regulator control circuit comprising a second thin film transistor formed over a substrate; and a switching element packed on a FPC, and driven according to an output signal from the switching regulator control circuit to raise or lower a voltage. The Applicant respectfully submits that Tomio and Yu, either alone or in combination, do not teach or suggest the above-referenced features of the present invention.

Since Tomio and Yu do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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